## Regional HIV/AIDS Epidemiologic Profile of Hampden County, Massachusetts: 2012

## Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH). Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports. and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

## Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2011: Hampden County, Massachusetts<sup>2</sup>

	N	%
People Living with HIV/AIDS	1,662	56%
People Reported with HIV or AIDS who are Deceased	1,285	44%
Total Number of People Reported with HIV Infection or		
AIDS	2,947	100%

<sup>&</sup>lt;sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999
<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

## Table 2. Average annual rate of HIV infection diagnosis from 2008 to 2010 and HIV/AIDS prevalence rate on 12/31/11<sup>1</sup>: Hampden County, Massachusetts<sup>2</sup>

Average annual HIV diagnosis rate from 2008–2010	Average rate per 100,000	Average annual number of HIV diagnoses
Hampden County, MA	12.0	55.7
Massachusetts Total	10.3	664.7

HIV/AIDS prevalence rate		Number of people
on 12/31/11	Rate per 100,000	living with HIV/AIDS
Hampden County, MA	358.6	1,662
Massachusetts Total	277.5	18,170

<sup>&</sup>lt;sup>1</sup> The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.
<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2001–2010, Hampden County, Massachusetts<sup>3</sup>

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2001	1,295	36	103
2001	· · · · · · · · · · · · · · · · · · ·		94
	1,344	45	
2003	1,386	49	91
2004	1,450	47	111
2005	1,496	43	87
2006	1,535	37	76
2007	1,552	37	54
2008	1,573	34	55
2009	1,584	37	48
2010	1,624	24	64

<sup>&</sup>lt;sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available ten-year period after the implementation of HIV infection reporting in 1999. 
<sup>3</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 4. People diagnosed with HIV infection from 2008–2010<sup>1</sup> and people living with HIV/AIDS on December 31, 2011 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Hampden County, Massachusetts<sup>2</sup>

	HIV Infection Diagr	noses	PLWH/A	
Gender:	N	%	N	%
Male	115	69%	1,006	61%
Female	52	31%	656	39%
Place of Birth:	N	%	N	%
US	112	67%	1,086	65%
Puerto Rico/US Dependency <sup>3</sup>	40	24%	485	29%
Non-US	15	9%	91	5%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	38	23%	390	23%
Black (non-Hispanic)	37	22%	331	20%
Hispanic/Latino	88	53%	922	55%
Asian/Pacific Islander	6	<b></b> <sup>6</sup>	12	1%
Other/Undetermined	<u></u> 6	6	7	<1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	54	32%	331	20%
Injection Drug Use (IDU)	30	18%	545	33%
MSM/IDU	6	<b></b> <sup>6</sup>	54	3%
Heterosexual Sex	22	13%	321	19%
Other	<u></u> 6	<b></b> <sup>6</sup>	55	3%
Total Undetermined	57	34%	356	21%
Presumed Heterosexual Sex <sup>4</sup> It a data are in a d <sup>5</sup>	17	10%	138	8%
Undetermined <sup>5</sup> A a a :      Undetermined	40 <b>N</b>	24%	218 <b>N</b>	13%
Age:		%		%
111-1-40	At Diagnosis	40/	On December 31,	
Under 13	2	1%	4	<1%
13 to 19	8	5%	15 41	1%
20 to 24 25 to 29	13 23	8% 14%	41 47	2%
30 to 34	23 20		93	3% 6%
35 to 39	20 20	12% 12%	93 125	6% 8%
40 to 44	20 18	12%	217	13%
45 to 49	23	14%	359	22%
50 to 54	23 18	11%	330	20%
55 to 59	10	6%	220	13%
60+	12	7%	211	13%
Total				

<sup>&</sup>lt;sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts

<sup>&</sup>lt;sup>3</sup> Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

<sup>&</sup>lt;sup>4</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>5</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up

with no determined risk, and those lost to follow-up.

<sup>6</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Hampden County, Massachusetts<sup>1</sup>

	Male	Female		
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	283	28%	107	16%
Black (non-Hispanic)	185	18%	146	22%
Hispanic/Latino	525	52%	397	61%
Asian/Pacific Islander	8	1%	<b></b> <sup>2</sup>	2
Other/Unknown	5	<1%	<b></b> <sup>2</sup>	2
Total	1,006	100%	656	100%
Other/Unknown	5	<1%		10

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 6. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Hampden County, Massachusetts<sup>1</sup>

	Male		Female		
Exposure Mode:	N	%	N	%	
Male-to-male sex (MSM)	331	33%	N/A	N/A	
Injection drug use (IDU)	351	35%	194	30%	
MSM/IDU	54	5%	N/A	N/A	
Heterosexual sex	69	7%	252	38%	
Other	30	3%	25	4%	
Total Undetermined	171	17%	185	28%	
<ul> <li>Presumed heterosexual sex<sup>2</sup></li> </ul>	N/A	N/A	138	21%	
<ul> <li>Undetermined<sup>3</sup></li> </ul>	171	17%	47	7%	
Total	1,006	100%	656	100%	

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Hampden County, Massachusetts<sup>1</sup>, 2001–2010<sup>2</sup>

l	Male	Female			
	N	%	N	%	Total
2001	73	67%	36	33%	109
2002	68	66%	35	34%	103
2003	60	64%	34	36%	94
2004	59	65%	32	35%	91
2005	65	59%	46	41%	111
2006	54	62%	33	38%	87
2007	45	59%	31	41%	76
2008	37	69%	17	31%	54
2009	36	65%	19	35%	55
2010	38	79%	10	21%	48

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Hampden County, Massachusetts<sup>1</sup>, 2001–2010<sup>2</sup>

	White Non-Hi	spanic	Black Non-Hispanic		Hispanic/La	atino	Total <sup>3</sup>
	N	%	N	%	N	%	N
0004	00	000/	47	470/	<b>5-7</b>	FF0/	400
2001	29	28%	17	17%	57	55%	103
2002	24	26%	20	21%	49	52%	94
2003	24	26%	17	19%	48	53%	91
2004	19	17%	31	28%	60	54%	111
2005	17	20%	22	25%	44	51%	87
2006	17	22%	14	18%	45	59%	76
2007	14	26%	11	20%	27	50%	54
2008	10	18%	15	27%	28	51%	55
2009	9	19%	12	25%	25	52%	48
2010	19	30%	10	16%	35	55%	64

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-vear period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Hampden County, Massachusetts<sup>1</sup>, 2001–2010<sup>2</sup>

	US		Puerto R US Depend	^	Non-U	S	Total
	N	%	N	%	N	%	N
2001	67	65%	31	30%	5	5%	103
2002	60	64%	22	23%	12	13%	94
2003	64	70%	21	23%	6	7%	91
2004	65	59%	34	31%	12	11%	111
2005	52	60%	26	30%	9	10%	87
2006	49	64%	20	26%	7	9%	76
2007	30	56%	18	33%	6	11%	54
2008	34	62%	16	29%	5	9%	55
2009	34	71%	9	19%	5	10%	48
2010	44	69%	15	23%	5	8%	64

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Hampden County, Massachusetts<sup>1</sup>, 2001–2010<sup>2</sup>

	MS	SM	ID	U	MS ID		НТ	SX	Otl	her	Pre HTS			eter- ned <sup>4</sup>	Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	23	22%	43	42%	5	5	14	14%	5	5	8	8%	12	12%	103
2002	17	18%	28	30%	<b></b> 5	5	21	22%	<b></b> 5	<b></b> 5	10	11%	13	14%	94
2003	21	23%	23	25%	<b></b> 5	<b></b> <sup>5</sup>	15	16%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	13	14%	15	16%	91
2004	18	16%	30	27%	<b></b> 5	<b></b> <sup>5</sup>	22	20%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	14	13%	21	19%	111
2005	20	23%	25	29%	5	<b></b> <sup>5</sup>	14	16%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	9	10%	18	21%	87
2006	19	25%	22	29%	<b></b> 5	<b></b> <sup>5</sup>	8	11%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	14	18%	12	16%	76
2007	14	26%	13	24%	Q	0%	7	13%	Ō	0%	6	11%	14	26%	54
2008	18	33%	11	20%	<b></b> 5	<b></b> 5	7	13%	5	<b></b> <sup>5</sup>	8	15%	9	16%	55
2009	17	35%	6	13%	<b></b> <sup>5</sup>	<b></b> 5	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	Ō	0%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	18	38%	48
2010	19	30%	13	20%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	11	17%	<b></b> <sup>5</sup>	<b></b> <sup>5</sup>	7	11%	13	20%	64

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Hampden County, Massachusetts<sup>1</sup>, 2001–2010<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2001	29	103	28%
2002	27	94	29%
2003	27	91	30%
2004	31	111	28%
2005	32	87	37%
2006	18	76	24%
2007	18	54	33%
2008	14	55	25%
2009	13	48	27%
2010	23	64	36%

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

before being reported in Massachusetts. <sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/12

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Hampden County, Massachusetts, 1 2008–2010<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male Female	40 10	115 52	35% 19%
Race/Ethnicity:	N	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Asian/Pacific Islander Other/Undetermined <sup>3</sup>	13 14 23 <sup>5</sup> <sup>5</sup>	38 37 88 <sup>5</sup> <sup>5</sup>	34% 38% 26% <sup>5</sup> <sup>5</sup>
Place of Birth:	N	N	%
US Puerto Rico/US Dependencies <sup>4</sup> Non-US <b>Total</b>	38 <sup>5</sup> <sup>5</sup> <b>50</b>	112 <sup>5</sup> <sup>5</sup> 167	34% <sup>5</sup> <sup>5</sup> <b>30%</b>

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/12

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. <sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Ninety-eight percent of people diagnosed with HIV infection from 2008–2010 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

dependency.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.